

Claims

1. (currently amended) A power distribution system comprising:
one or more loads, each load operable to be mounted in a rack location;
a plurality of power sources, each power source having a capacity less than each load and operable to be mounted in a rack location not having a load such that said capacity of said power sources is greater than said one or more loads; and

an interconnect arrangement including a plurality of interconnects, the interconnects directly connecting each load to each of the sources in parallel such that each load is fully powered and if anyone source fails, each load remains fully powered.

2. (original) The power distribution system of claim 1 wherein all of the sources are DC sources.

3. (original) The power distribution system of claim 1 wherein all of the sources are AC sources.

4-5 (cancelled)

6. (previously presented) The power distribution system of claim 1 wherein the one or more loads, the plurality of power sources and the interconnect arrangement together comprise a power distribution subsystem, wherein the one or more loads includes a 4X watt load, wherein the plurality of sources include first, second, and third 2X watt sources, and wherein the

interconnect arrangement includes interconnects that connect the 4X watt load to each of the first, second, and third 2X watt sources, X having a numeric value.

7. (previously presented) The power distribution system of claim 1 wherein the one or more loads, the plurality of power sources and the interconnect arrangement together comprise a power distribution subsystem, wherein the one or more loads includes a 5X watt load, wherein the plurality of sources include first, second, third, fourth, fifth, and sixth 2X watt sources, and wherein the interconnect arrangement includes interconnects that connect the 5X watt load to each of the first, second, third, fourth, fifth, and sixth 2X watt sources, X having a numeric value.

8. (previously presented) The power distribution system of claim 1 wherein the one or more loads includes a 10X watt load, wherein the plurality of sources include first, second, third, fourth, fifth, and sixth 2X watt sources, and wherein the interconnect arrangement includes interconnects that connect the 10X watt load to each of the first, second, third, fourth, fifth, and sixth 2X watt sources, X having a numeric value.

9-11(cancelled)

12. (previously presented) The power distribution system of claim 1 wherein the one or more loads includes an 8X watt load, wherein the plurality of sources include first, second, and third 4X watt sources, and wherein the interconnect arrangement includes interconnects that connect the 8X watt load

to each of the first, second, and third 4X watt sources, and wherein the interconnect arrangement includes interconnects that connect the 8X watt load to each of the first, second, and third 4X watt sources, X having a numeric value.

13. (currently amended) A power distribution system comprising:
a plurality of loads, each load operable to be mounted in a rack location;
a plurality of power sources, the power sources having a collective capacity to fully power all of the loads and each power source having a capacity less than each load and operable to be mounted in a rack location not having a load such that said capacity of said power sources is greater than said one or more loads; and

an interconnect arrangement including a plurality of interconnects, the interconnects directly connecting each load to each of the sources in parallel such that each load is fully powered notwithstanding failure of anyone of the sources.

14. (previously presented) A method of distributing full power to each one of a plurality of loads, each load operable to be mounted in a rack location, the method comprising:

providing a plurality of power sources, each power source having a capacity less than each load and operable to be mounted in a rack location not having a load, the power sources being sufficient in number and capacity such that a combination of less than all of the sources is sufficient to power each load; and

directly connecting each load to each of the sources in parallel such that if anyone source fails, each of the loads remains fully powered.

15. (previously presented) The power distribution system of claim 1 wherein the one or more loads include first and second $5X$ watt loads, wherein the plurality of sources include first, second, third, fourth, fifth, and sixth $2X$ watt sources, and wherein the interconnect arrangement includes interconnects that connect the first $5X$ watt load to each of the first, second, third, fourth, fifth, and sixth $2X$ watt sources and the second $5X$ watt load to each of the first, second, third, fourth, fifth, and sixth $2X$ watt sources, X having a numeric value.

16. (previously presented) The power distribution system of claim 1 wherein the number of sources is three-times the number of loads.

17. (previously presented) The power distribution system of claim 1 wherein the number of sources is six-times the number of loads.